

SWEDISH GHOST FIGHTER

First Details of the Swept-back S.A.A.B. J.29

SEVERAL references have already been made in *Flight* to the existence in Sweden of an advanced Ghost-powered fighter prototype, and, in fact, under a promise of secrecy a member of our staff was recently able to examine this aircraft as it neared completion in the SAAB experimental section at Linköping. Permission has now been given to release some preliminary information and photographs. The exceptionally clean and thin wing which has a sweep-back of 28 degrees, is the principal feature of the design. The fuselage, in which all the equipment is concentrated, is somewhat bulbous, and has led to the machine being given the somewhat unkind local nickname of "the barrel." A speed of about 650 m.p.h. is hoped for and the weight will be around 12,000 lb with full tanks and all equipment installed.

The D.H. Ghost is located well back and fairly low down in the fuselage, and to reduce intake problems, a straight-through air duct from an orifice in the nose has been employed. A nozzle in ventral position keeps the jet pipe down to its most efficient length, and, incidentally, allows the undercarriage to be as short as possible without over-reducing ground clearance at the tail. The undercarriage is mounted on the fuselage and folds up into the belly.

The wing is of symmetrical, elliptical section, and the internal structure can only be described as massive. The heavy-gauge skin is of 75 S. alloy, a material which possesses some 40 per cent greater strength than the normal dural sheet. The span is 36ft (11 m) and automatic wing tip slots are fitted although not shown in the photograph.

Tail surfaces are placed high to keep them as remote as pos-



A thin, backswept wing, clear of all excrescences and equipment, is a particular feature of the J.29.

sible from the wake of the wings and fuselage, and the tail-plane incidence is variable.

The lead-in section at the wing root tapers off to a knife-edge nose, and has a sweep-back angle of 45 degrees. When work commenced on the J.29, or R100r, as it was first called, some 2½ years ago, information on such an advanced design was scanty. Sweden is therefore to be congratulated on the success so far achieved in producing such a promising-looking fighter. This was only possible as a consequence of a very comprehensive research and test programme in the wind tunnel, and later with the aid of the Safir with special swept-back wings illustrated on page 668.

A very roomy pressurized cockpit is provided; vision from it is excellent, and the pilot's seat is of the ejector type.

A first flight should take place in the early autumn, probably from the military airfield at Noorköping.

HASTINGS HOME AGAIN

THE Handley-Page Hastings TG503, after completing its 35,000-mile demonstration tour of Australia and New Zealand, returned to Radlett on June 6th. A reception to mark the completion of this important flight was held at Londonderry House, Park Lane, on Wednesday, June 9th, and on this occasion many people were able to hear at first-hand the experiences of Captain Hazelden and his crew. It seems that it was the practice at each main stopping point to allow Australian engineers and maintenance staff a free run of the Hastings for a day or more, so that they might see for themselves its excellent qualities. The opinion was generally expressed that it was good to see a plain, straightforward engineering job, entirely free from "fancy bits."

As might be expected from a progressive country much influenced in aviation matters by America, a tail-down design starts off at a considerable disadvantage. However, until the Hermes IV and V are flying, it was a good plan to combine a demonstration tour of this earlier mark with the manufacturers' proving flight through a variety of climatic conditions. Most Australian pilots who flew the Hastings were impressed with its performance and handling. The Bristol engines behaved faultlessly on the tour, and a.m.p.g. figures were very satisfactory.

The Royal Australian Air Force does not at present, we are told, have a requirement for a four-engined transport of the Hastings type. They express a preference, to meet their needs and to suit their pockets, for a twin-engined, tricycle design. Much as there is to say in favour of the nose-wheel layout, there is no doubt that the on- and off-loading of military equipment from tail-high fuselages presents a considerable problem. On another page of this issue the ease with which guns and vehicles can be ramp-loaded into standard R.A.F. transports of the Valetta or Hastings type, is illustrated.

An encouraging impression formed by the Handley-Page

party was that Australia as a whole is still ready and anxious to buy and fly British, but American companies, who at the end of the war were able to offer and deliver first-class aircraft and after-sales service, are now well dug in. It is up to the British Industry to provide vigorous competition as soon as possible, and there is no doubt that our products will be well received in Australian markets.

SIR ARTHUR SIDGREAVES

IT was with great regret that we learned of the death on June 7th of Sir Arthur Sidgreaves, O.B.E., who for seventeen years was managing director of the Rolls-Royce company. It may be truthfully stated that he is a war casualty. Friends who saw him and worked with him during the war years were aware of the tremendous tempo which he forced himself to maintain in his tireless efforts to improve the quantity and quality of war materials flowing from the rapidly expanding factories which he directed. It was this overwork which caused his health to break down. He could claim a great part of the credit due for the production of the vitally important Merlin engine, and it was for his contributions to the aircraft industry in the capacity of organizer that he was knighted in 1945.

Sir Arthur Sidgreaves was 66 years of age and was educated at Downside. He worked for Napier and Sons, Ltd., for their pioneer associates, S. F. Edge, Ltd., during the years from 1902 until the outbreak of the Great War. He then joined the R.N.V.R. and was draughted to the R.N.A.S. Later he was transferred to a department of the Air Ministry expediting the production of Rolls-Royce engines. In 1918, when he was made an O.B.E., he rejoined Napier's, but two years later resigned to become export sales manager of Rolls-Royce, Ltd. From general sales manager in 1926 he became managing director of the company in 1929. He was elected president of S.B.A.C. for the year 1942-3.

We extend our sympathy to his widow and family.